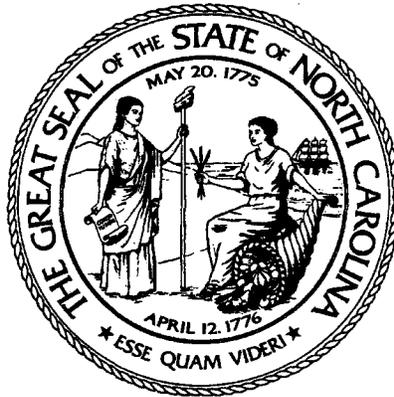


LEGISLATIVE COMMITTEE ON NEW LICENSING BOARDS

Assessment Report
for

Photogrammetrists

Senate Bill 787
House Bill 794



LEGISLATIVE COMMITTEE ON NEW LICENSING BOARDS

May 19, 1997

The Legislative Committee on New Licensing Boards is pleased to release this assessment report on the licensing of photogrammetrists. This report constitutes both the preliminary and final assessment report.

W. Frank Mitchell
Representative Frank Mitchell, Chairman

Linwood Jones
Prepared by:
Linwood Jones, Counsel

LEGISLATIVE COMMITTEE ON NEW LICENSING BOARDS

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Counsel: Mr. Linwood Jones
Mrs. Linda Attarian

90LLJ-02651

PREFACE

The Legislative Committee on New Licensing Boards is a 9-member joint committee of the House and Senate created and governed by statute (Article 18A of Chapter 120 of the General Statutes). The primary purpose of the Committee is to evaluate the need for a new licensing board or the proposed licensing of previously unregulated practitioners by an existing board. The Committee has been in existence since 1985.

The Committee solicits written and oral testimony on each licensing proposal in carrying out its duty to determine whether the proposal meets the following criteria:

- (1) Whether the unregulated practice of the profession can substantially endanger the public health, safety, or welfare, and whether the potential for such harm is recognizable and not remote or dependent upon tenuous argument.
- (2) Whether the profession possesses qualities that distinguish it from ordinary labor.
- (3) Whether practice of the profession requires specialized skill or training.
- (4) Whether a substantial majority of the public has the knowledge or experience to evaluate the practitioner's competence.
- (5) Whether the public can effectively be protected by other means.
- (6) Whether licensure would have a substantial adverse economic impact upon consumers of the practitioner's good or services.

The Committee issues an assessment report on its findings and recommendations. The recommendation in the report is not binding on other committees considering the proposal.

PHOTOGRAMMETRISTS

Photogrammetry is a branch of land surveying that involves aerial photography. Currently, photogrammetrists must have a registered land surveyor to provide "ground control in order to tie their work to the earth's surface." This ensures that a licensed professional has reviewed the surveying aspects of the work and approves it. Photogrammetrists, like land surveyors, use sophisticated state-of-the-art equipment to map land tracts. These professionals also rely on the same types of technical background and mathematical aptitude as land surveyors. The map data interpreted and reported from imagery-by photogrammetrists is used for highway design, landfill and sewage systems, infrastructure maintenance, emergency response, and GIS base maps, among other things.

Senate Bill 787 and House Bill 794 would require photogrammetrists seeking licensure after July 1, 1998 to meet the same educational, experience, and examination requirements as a land surveyor. A person already practicing photogrammetry and who has been practicing for at least seven years (at least two of which were in responsible charge of photogrammetric mapping projects meeting National Map Accuracy Standards) may apply for a license before July 1, 1998, without having to meet these requirements.

The Board that regulates land surveyors and engineers estimates that there are approximately 150 persons who would be affected by this licensure

inappropriate image resolutions and the use of "non-rigorous photogrammetric restitutions."

The Legislative Committee on New Licensing Boards finds that the sponsors have met the six statutory criteria by which the Committee judges licensure proposals, as follows:

- (1) The unregulated practice of the profession can substantially harm or endanger the public health, safety, or welfare, and the potential for such harm is recognizable and not remote nor dependent upon tenuous argument.
- (2) The practice of the profession possesses qualities that distinguish it from ordinary labor.
- (3) The practice of the profession requires specialized skill and training.
- (4) A substantial majority of the public does not have the knowledge or experience to evaluate the practitioner's competence.
- (5) The public cannot be effectively protected by other means.
- (6) Licensure would not have a substantial adverse economic impact upon consumers.

The Legislative Committee on New Licensing Boards recommends licensure of photogrammetrists. This assessment report constitutes both the preliminary and the final assessment report for the licensing of photogrammetrists. The report is based on the proposed licensing of photogrammetrists, as set out in Senate Bill 787 and House Bill 794, the

response to the Committee's questionnaire (attached), and testimony before the Committee on May 12, 1997.

PHOTOGAMMETRY

MEMORANDUM

TO: Representative Bill Ives

FROM: Jerry T. Carter
Executive Secretary

RE: Questionnaire - Legislative Committee on New Licensing Boards
(Proposed Amendments to G.S. 89C)

- (1) *In what way has the marketplace failed to regulate adequately the profession or occupation?*

The marketplace has not failed to regulate the occupation of photogrammetry; changes in technology and history dictate the proposal to bring photogrammetrists under the authority of G.S. 89C. Photogrammetrists employ many of the same techniques and equipment as Registered Land Surveyors in providing aerial mapping of property. Under existing regulations, a photogrammetrist must employ a Registered Land Surveyor to provide ground control in order to tie the property to the face of the earth. This action to modify G.S. 89C was not initiated by the Board of Registration but by the North Carolina Chapter of The American Society for Photogrammetry and Remote Sensing whose president stated "It is the opinion of our organization and those we have contacted that photogrammetrists are engaged in providing a professional service that directly impacts the health, safety and welfare of the public. As such, we feel that photogrammetrists would require licensing and request that the Board consider this issue."

- (2) *Have there been any complaints about the unregulated profession or occupation? Please give specific examples including (unless confidentiality must be maintained) complainants' names and addresses.*

The Board of Registration has received no formal complaints concerning photogrammetrist offering or providing photogrammetrical work. The Board has received complaints about photogrammetrists offering and providing land surveying services while not properly licensed. In each instance, the Board has been able to obtain voluntary compliance.

- (3) *In what ways has the public health, safety, or welfare sustained harm or is in imminent danger of harm because of the lack of state regulation? Please give specific examples.*

Photogrammetrists do not currently operate under a code of professional conduct nor are they subject to any specific standards in performing work. The general welfare of the public would be served by making photogrammetrists accountable for their work with the potential of disciplinary action for substandard work.

- (4) *Is there potential for substantial harm or danger by the profession or occupation to the public health, safety, or welfare? How can this potential for substantial harm or danger be recognized?*

There is potential for harm to the welfare of the general public by practitioners that do not employ standard procedures and applications in completing their work. This could impact the consuming public by increased fees to correct errors, legal fees, time invested in Court, etc.

- (5) *Has this potential harm or danger to the public been recognized by other states or the federal government through the licensing or certification process? Please list the other states and any applicable federal law (including citations).*

The State of Florida amended its land surveying statutes in 1995 to extend the definition of land surveying to include "mappers" and "photogrammetric mappers".

- (6) *What will be the economic advantage of licensing to the public?*

Consistency in the performance of services; professionals are required stay abreast of changes in the field through mandatory continuing competency requirements; a regulatory authority the public can turn to in cases of gross negligence, incompetence or misconduct.

- (7) *What will be the economic disadvantage of licensing to the public?*

There is no evidence that the licensure of photogrammetrists as Registered Land Surveyors will provide any economic disadvantage to the general public.

- (8) *What will be the economic advantages of licensing to the practitioners?*

Ability to form Professional Corporations; resources of the Board of Registration for matters of interpretation and application; services elevated from that of a trade to a professional service.

- (9) *What will be the economic disadvantages of licensing to the practitioners?*

Annual renewal; moneys expended (if any) to comply with continuing education requirements.

- (10) *Please give other potential benefits to the public of licensing that outweigh the potential harmful effects of licensure such as a decrease in the availability of practitioners and higher costs to the public.*

Because of regulation, a practitioner is accountable for his actions to the Board which can remove the privilege for noncompliance. The consuming public also has a resource other than the Courts for acts of unprofessional conduct.

- (11) *Please detail the specific specialized skills or training that distinguish the occupation or profession from ordinary labor.*

Both photogrammetrists and Registered Land Surveyors utilize state-of-the-art equipment to properly map tracts of land. Both require a high degree of aptitude for math and require years of progressive experience in order to offer their services in a competent manner.

- (12) *What are other qualities of the profession or occupation that distinguish it from ordinary labor?*

The effects from the work performed can have an influence that is widely felt. This can include the boundaries of individual tracts of land, large industrial tracts, and county maps. A high level of skill is required along with appropriate experience.

- (13) *Will licensing requirements cover all practicing members of the occupation or profession? If any practitioners will be exempt, what is the rationale for the exemption?*

All practitioners will be governed under the modified provisions of G.S. 89C, without exception.

- (14) *What is the approximate number of persons who will be regulated and the number of persons who are likely to utilize the services of the occupation or profession?*

The approximate number of practicing photogrammetrists who would be subject to regulation would be less than 150 individuals. There is no method by which the number of persons who are likely to utilize the services of the profession can be determined. The need that currently exists for photogrammetrical services will continue regardless of any action taken to modify G.S. 89C.

- (15) *What kind of knowledge or experience does the public need to evaluate the services offered by the practitioner?*

The public needs to have some limited understanding of the processes used to obtain the information and to understand how the final product will be provided. Questioning various practitioners will generally provide enough base information to guide the consumer on who to select and what services are needed.

- (16) *Does the occupational group have an established code of ethics, a voluntary certification program, or other measures to ensure a minimum quality of service?*

The NC Photogrammetric Society is a voluntary organization and has no code of professional conduct that is enforceable and that would prevent an incompetent practitioner from continuing to offer services to the public. There currently exists no measures to ensure the quality of service provided to the general public at any level.

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NORTH CAROLINA CHAPTER
OF
THE AMERICAN SOCIETY FOR PHOTOGAMMETRY AND REMOTE SENSING

NC STATE BOARD OF REGISTRATION
FOR PROFESSIONAL ENGINEERS
AND LAND SURVEYORS

P.O. Box 18404, Greensboro, NC 27419

PRESIDENT:
JEFF LEONARD

SECRETARY-TREASURER:
DARRELL MILLER

January 31, 1995

Mr. J. Richard Cottingham, P.E., R.L.S., Chairman
**NC STATE BOARD OF REGISTRATION FOR
PROFESSIONAL ENGINEERS AND LAND SURVEYORS**
3620 Six Forks Road, Suite 300
Raleigh, NC 27609

RE: Licensing of Photogrammetrists

Dear Mr. Cottingham:

I am writing to you as a representative of the North Carolina Chapter of the American Society for Photogrammetry and Remote Sensing (NCASPRS). As you are aware, discussions have been taking place within this organization and in conjunction with various engineering and surveying organizations within the state regarding the licensing of photogrammetrists under the NC State Board of Registration for Professional Engineers and Land Surveyors (Board). Since the topic was first broached at the July 15, 1994, meeting of the Board, representatives from the NC Society of Surveyors (NCSS), Professional Engineers of NC (PENC), NCASPRS, and the Board have met to consider this issue.

At each of these meetings it was the consensus of the attendees that photogrammetrists should be licensed. The map data interpreted and reported from imagery by photogrammetrists is utilized for such purposes as the design of highways, landfills and sewage systems, infrastructure maintenance, emergency response and the base maps for geographic information systems. As such, the work performed by photogrammetrists directly impacts the health, safety and welfare of the public.

The development of this information to currently accepted accuracy and precision standards requires skilled, professional planning and execution of each phase of the photogrammetric processes. Unfortunately, in this climate of restrictive budgets and fierce competition, corner cutting approaches are sometimes being taken in the development of geographic information that include inappropriate image resolutions for the nominal map scale of the landbase being developed, and the use of non-rigorous photogrammetric restitutions. This type of short-term thinking results in dissemination of disinformation that jeopardizes the public welfare.

It is the opinion of our organization and those we have contacted that photogrammetrists are engaged in providing a professional service that directly impacts the health, safety and welfare of the public. As such, we feel that photogrammetrists should require licensing and request that the Board consider this issue. We will be pleased to provide any information or assistance you require to make an informed decision regarding this matter.

Sincerely,

Jeff J. Leonard, C.P.
President

